

Date: Friday, 13/02/2009 1:02:36 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: HINGE
Job Number	: 45795		
Estimate Number	: 13565		
P.O. Number	:	Part Number	: D38131
This Issue	: 13/02/2009 S.O. No. :	Drawing Number	: D3813 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : MACHINED PARTS	Drawing Revision	: A
Previous Run	: 42052	Material	:
Written By	:	Due Date	: 20/02/2009 Qty: 12 Um: Each
Checked & Approved By	: <u>JUL 09.02.13</u>		
Comment	: Est Rev:A New Issue 08-09-03 JLM Verified By:EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M6061T6B2500X03500	6061-T6 Bar 2.50 x 3.50
-----	--------------------	-------------------------



Comment: Qty.: 0.2671 f(s)/Unit Total : 3.2054 f(s)

6061-T6 Bar 2.500" x 3.50"

BATCH: M105212

DTF 09/02/15 (12)

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW

Cut blank 3.050" " long

DTF 09/02/15 (12)

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA779 Rev: AA & Dwg D3813 Rev: A

2-Deburr per dwg D3813

3-Finish tapping hole to final depth as per Dwg D3813

J.F. 09/02/18 (12)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 09/02/18 (12)

5.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

SP 09/02/21 (15)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 13/02/2009 1:02:37 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HINGE

Job Number: 45795

Part Number: D38131

Job Number:



Seq. #: Machine Or Operation: Description :

6.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



(12)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

FL 09/02/23

7.0 POWDER COATING POWDER COATING



M109996

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

MASK THREADED HOLE PRIOR TO POWDER COAT

START TIME: 10:00am

OVEN TEMPERATURE: 320°C

FINISH TIME: 10:30am

JP 09-02-24

8.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



(12)

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BL 09-02-24

9.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 5(12)

SS 09/02/23

10.0 QC21 FINAL INSPECTION/W/O RELEASE



09/02/25

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



11 09.02.25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 45795
Description: Hinge		Part Number: 03813-1
Inspection Dwg: 3813	Rev: A	Page 1 of 1

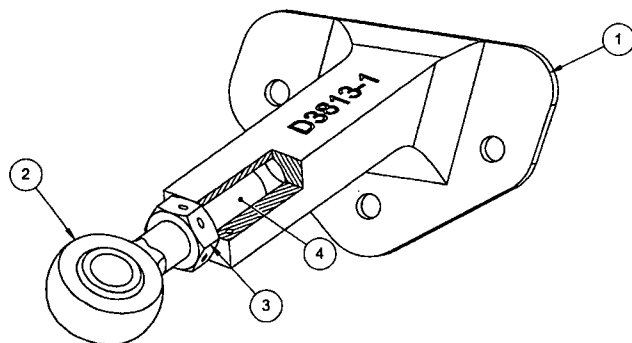
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.125"	$\pm .010$	.117"	✓			
.56"	$\pm .030$	.552"	✓			
R.0.31"	$\pm .030$	R.310"	✓			4 PL
2.89"	$\pm .030$	2.904"	✓			
1.99"	$\pm .030$	2.001"	✓			
.43"	$\pm .030$	.435"	✓			
.48"	$\pm .030$	.369"	✓			
Ø .219"	$\pm .005$	Ø .220"	✓			3 PL
.70"	$\pm .030$	.698"	✓			
1.05"	$\pm .030$	1.051"	✓			
.94"	$\pm .030$	.942"	✓			
.90"	$\pm .030$	.908"	✓			
1.55"	$\pm .030$	1.554"	✓			
.69"	$\pm .030$	.683"	✓			
.09"	$\pm .030$	.092"	✓			
.130"	$\pm .030$	.123"	✓			
Ø .06"	$\pm .004$	Ø .060"	✓			
.28"	$\pm .030$	.287"	✓			
.28"	$\pm .030$	.278"	✓			
1.25 DP	$\pm .030$	1.220"	✓			

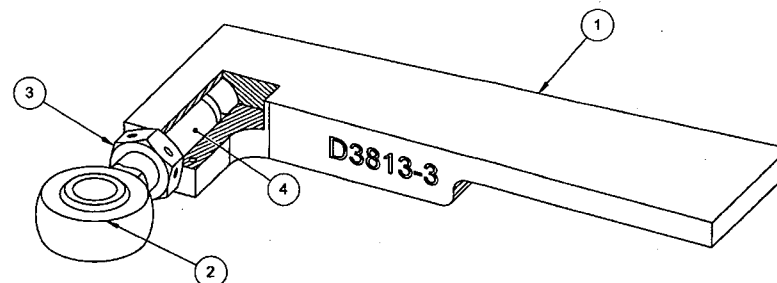
Measured by: JF	Audited by: SP	Prototype Approval:	N/A
Date: 09/02/21	Date: 09/02/21	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY. -041
1	D3813-1	HINGE, UPPER DOOR	1
2	D3518-3	BALL JOINT ROD END	1
3	NAS509-6	NUT	1
4	MS124738	HELI-COIL, 3/8-24 UNF	1

D3813-041 HINGE ASSY, UPPER DOOR



ITEM NO.	PART NUMBER	DESCRIPTION	QTY. -043
1	D3813-3	HINGE, LOWER DOOR	1
2	D3518-3	BALL JOINT ROD END	1
3	NAS509-6	NUT	1
4	MS124738	HELI-COIL, 3/8-24 UNF	1

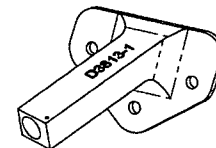
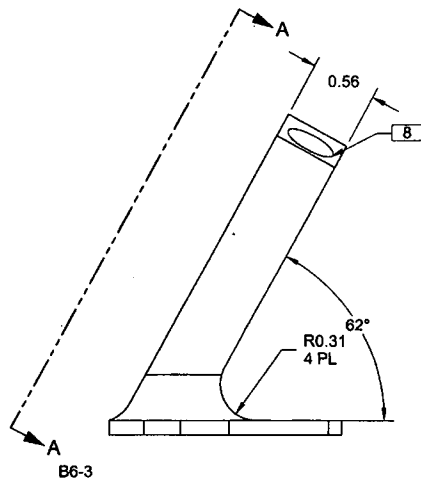
D3813-043 HINGE ASSY, LOWER DOOR

RELEASED
09/01/13

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
NO 45795

A	NEW ISSUE	DESCRIPTION	BY	DATE
REV.				
DESIGN				
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	08.11.10			

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3813	REV. A SHEET 1 OF 4
TITLE HINGE	SCALE NTS
COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



RELEASED
09/01/13

1) MATERIAL: 6061-T6 (OR 61-T651/T6510/T6511/T62) BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160), (REF. DART SPEC. M6061T6B)

2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE GLOSS" (4.3.5.1) PER DART QSI 005 4.3

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED


4) UNITS: INCHES UNLESS OTHERWISE NOTED

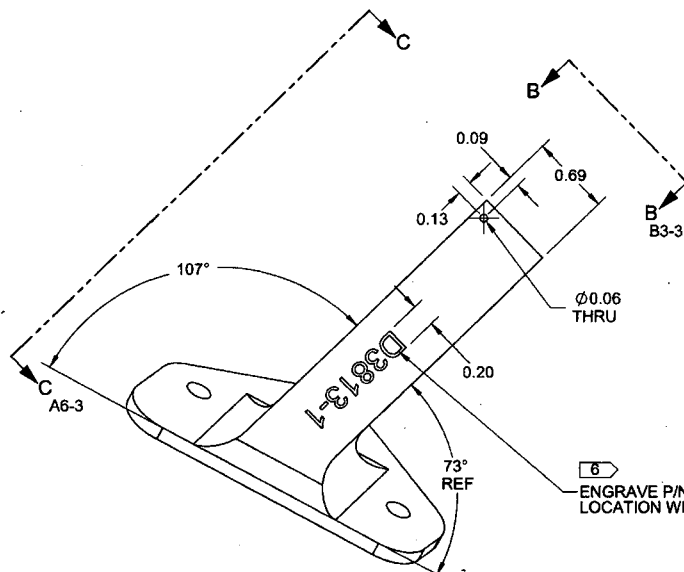
5) BREAK SHARP EDGES: 0.020 TO 0.030 MAX

6) IDENTIFICATION: ENGRAVE P/N AS SHOWN

7) WEIGHT: 0.14 lbs

8) MASK HOLE PRIOR TO POWDER COAT

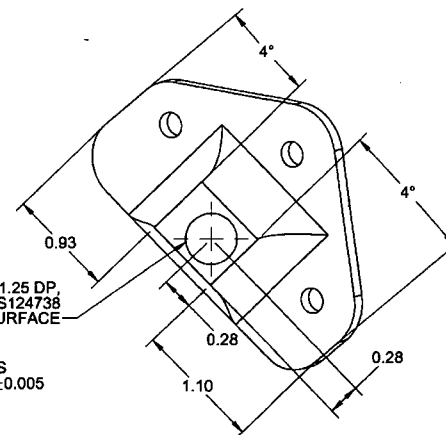
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3813	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		HINGE	NTS
DATE	08.11.10	COPYRIGHT © 2008 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE, LTD.	



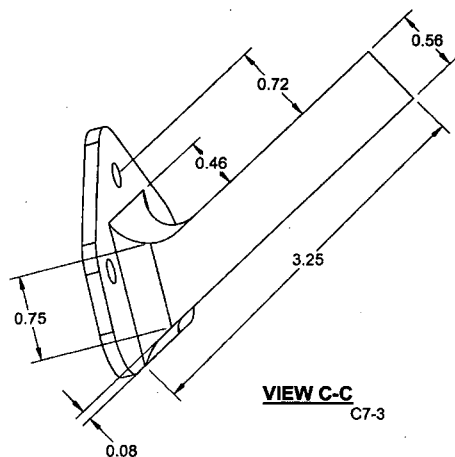
VIEW A-A
C4-2

Ø0.391 X 1.25 DP,
INSTALL HELICOIL MS124738
FLUSH WITH SURFACE

6
ENGRAVE P/N TO DEPTH OF 0.005 IN THIS
LOCATION WITH TOOL TIP RAD OF 0.015 ± 0.005



VIEW B-B
D5-3



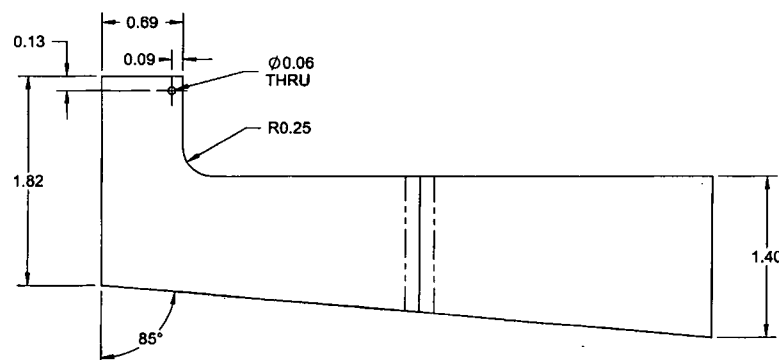
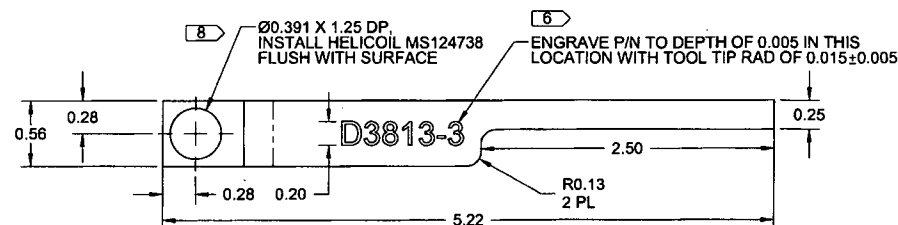
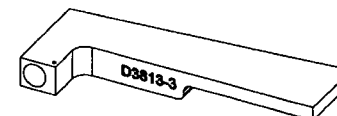
VIEW C-C
C7-3

D3813-1 HINGE, UPPER DOOR

RELEASED
09/01/13

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3813	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		HINGE	NTS
DATE	08.11.10	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

SHIP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
ATTENTION PCB
NO 45795



D3813-3 HINGE, LOWER DOOR

RELEASED
09/07/13

NO. 45785
VORTEX
WITNESS
UNCONTROLLED
SUBJECT TO
PAGE 007
RETURN TO
SHIP COPY

- NOTES:
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) PER AMS-QQ-A-200/8 (OR AMS 4160), (REF. DART SPEC. M6061T6B)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE GLOSS" (4.3.5.1) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.020 TO 0.030 MAX
 - 6) IDENTIFICATION: ENGRAVE P/N AS SHOWN
 - 7) WEIGHT: 0.24 lbs
 - 8) MASK HOLE PRIOR TO POWDER COAT

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3813	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		HINGE	NTS
DATE	08.11.10	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	